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APPARATUS AND METHOD FOR MAINTAINING COMPRESSION OF THE ACTIVE AREA IN AN ELECTROCHEMICAL CELL

ABSTRACT

An electrochemical cell includes a first electrode, a second electrode, a proton exchange membrane disposed between and in intimate contact with the electrodes, and a pressure pad disposed in electrical communication with the first electrode. The pressure pad is compatible with the cell environment and is configured to support the electrodes and the membrane. The pressure pad includes an electrically conductive member and a compression member disposed at the electrically conductive member. A method of maintaining compression within the cell includes disposing the electrically conductive member and the compression member at the first electrode, applying a load at the cell to compress the cell components, and maintaining electrical communication through the electrically conductive member.